

THE FIRST WHITE SEA COMPARATIVE PHYSIOLOGY SUMMER SCHOOL: CONCLUSIONS AND PERSPECTIVES

In general, we consider the School as an important event in the field of comparative physiology. Comparative studies are less obviously related to practical applications, so it can sometimes be difficult to fund such research or teaching. Therefore, the enthusiastic support of Russian organizers is especially worthy. Thanks to the low costs of the course, it represents a unique chance for students from all over the world to learn useful physiological techniques and learn about recent scientific findings in this field. After thorough analysis of students' questionnaires we are now aware of the main advantages and disadvantages of the 2012 event. Positive feedback from the students encourages us to organize the Second White Sea School in 2015 with several improvements, which should make the school even more successful.

Laboratory practicals

Practical classes were definitely the most worthy part of the past School. In some universities, practical tasks have been removed from physiology courses, leaving students interested in physiology with little or no chances to develop experimental methods or compare pros and cons of different methods. Schools like the past one can really help these students, so during the Second school we will focus especially on the practical classes.

According to the student feedback, the tasks on calcium imaging, action potential registration and recording of fish ECG were the most successful and will definitely go to the Second school. We plan to add to the program patch-clamp of fish cardiomyocytes, registration of contractile activity in blood vessels, and one more in vivo technique on the fish cardiovascular system. Therefore the Second school will be more tightly focused on cardiovascular physiology. This will raise the integrity and overall level of the course.

We also have to provide a separate instructor for each of the practical tasks! For each task we should not only provide a theoretical introduction, but point which definite results the students should obtain during their work. In the end of each task the results should be analyzed and discussed.

Lectures

The students found most of the lectures OK. Lectures given by our foreign researchers seemed to be the most interesting, thanks to good balance between "scientific" and "educative" components together with clear, simple and illustrative way of presentation.

However, overall students would prefer the lectures to provide theoretical background to the laboratory practicals. As long as practical course will be seriously modified at the next School, the lecture list will be also changed significantly and focused mainly on cardiovascular aspects of comparative physiology.

Social activities, popular lectures & everyday life

All the participants were extremely pleased with parties, lectures and other activities, except movies. So, we will try to select movies more thoroughly, add one more sea excursion as well as arrange time for forest walks and move disco to a place better than the dark cellar of lab building.

Living conditions at WSBS significantly improve each year. During the last 5 years a great progress was achieved in hostel conditions, hygienic level and quality of food. We are glad that most of students were

quite satisfied with the level of comfort, but we will definitely be able to provide even better lodging and living conditions to the participants of the next school. In particular, new banya will be constructed next year, pillows and mattresses will be changed. We'll also try to provide a supply with fresh fruits and vegetables for the next school.

Overall the 1st WSBS physiological school should be considered a success. And should become a regular event giving international students a chance to improve their practical skills while learning about the unique natural environment of the White Sea. The ultimate aim is for this course to increase the profile of the WSBS in physiological research and Russian physiological research in the wider community.

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